

WE CLAIM AS OUR INVENTION:

1. A method for creating a standard measurement protocol for a tomographic imaging system, comprising the steps of:

at a computerized interface with which an operator can interact, displaying a planning representation of a standard object;

by interacting through said interface with the displayed planning representation, defining a spatial position, relative to said standard object, of a standard tomographic area in said planning representation;
and

generating and storing a standard measurement protocol comprising parameters associated with said standard imaging area and a reference that designates said standard object.

2. A method as claimed in claim 1 wherein the step of saving and storing said standard measurement protocol comprises storing parameters that define said spatial position of said standard imaging area.

3. A method as claimed in claim 1 wherein the step of generating and storing a standard measurement protocol further comprises including in said standard measurement protocol parameters for operating said tomographic imaging system to obtain an image, within said standard imaging area, of an actual object, corresponding to said standard object, in said tomographic imaging system.

4. A method as claimed in claim 1 wherein said tomographic imaging system is a magnetic resonance imaging apparatus, and wherein the step of generating and storing a standard measurement protocol further comprises including designation of a pulse sequence for said magnetic resonance imaging apparatus for obtaining an image, within said standard imaging area, of an actual object,

corresponding to said standard object, in said magnetic resonance imaging apparatus.

5. A method as claimed in claim 1 wherein said standard object is a standard anatomical object, and wherein the step of displaying a planning representation comprises displaying a planning representation of said standard anatomical object comprising anatomical features of said standard anatomical object.

6. A method as claimed in claim 5 comprising displaying geometrical features of said standard anatomical subject as said anatomical features.

7. A method as claimed in claim 5 comprising compiling said planning representation of said standard anatomical subject as a statistical average of a plurality of actual objects corresponding to said standard anatomical object.

8. A computer program product comprising a storage medium in which a standard measurement protocol is stored, said storage medium being loadable into a computer that controls operation of a tomographic imaging apparatus, said standard measurement protocol defining, for said tomographic imaging apparatus, a spatial position of a standard imaging area of a standard object, and a designation characterizing said standard object.

9. A computer program product as claimed in claim 8 wherein said standard measurement protocol comprises geometrical parameters defining said spatial position of said standard imaging area.

10. A computer program product as claimed in claim 8 wherein said designation characterizing said standard object is an identification of said standard object.

11. A computer program product as claimed in claim 8 wherein said characterization of said standard object includes an identification of an image acquisition system which was used to generate said standard object.

12. A computer program product as claimed in claim 8 wherein said designation comprises a representation of features of said standard object selected from the group consisting of anatomical features, geometrical features and statistical features.

13. A computer program product as claimed in claim 8 further comprising a designation of a type of tomographic imaging system operable using said standard measurement protocol.

14. A computer program product as claimed in claim 8 wherein said standard measurement protocol further comprises a designation of a pulse sequence for operating a magnetic resonance imaging apparatus for obtaining an image, within said standard imaging area, of an actual object, corresponding to said standard object, in said magnetic resonance imaging apparatus.

15. A method for planning positioning of an imaging area in an actual object in a tomographic imaging system, comprising the steps of:

placing said actual object in said tomographic imaging system and generating data representing features of said actual object using said tomographic imaging system;

making a standard measurement protocol available to a computer, said standard measurement protocol defining a spatial position of a standard imaging area with reference to a standard object, said standard measurement protocol referencing a dataset representing features of said standard object;

in said computer, determining a geometrical relation between said features of said actual object and said features of said standard object, from said dataset representing said features of said actual object and said dataset representing said features of said standard object;

creating an actual object-specific measurement protocol, wherein said imaging area is positioned relative to said actual object, by modifying said standard measurement protocol dependent on said geometrical relation; and

using said object-specific measurement protocol to obtain an image of said actual object within said image area in said tomographic imaging system.

16. A method as claimed in claim 15 wherein said actual object is a patient and wherein said standard object is a standard anatomical object, and wherein said features represented by the respective datasets are anatomical features.

17. A method as claimed in claim 15 wherein the step of modifying said standard measurement protocol to create said object-specific measurement protocol comprises positioning said imaging area relative to said actual object identically to a position of said standard imaging area relative to said standard object.

18. A method as claimed in claim 15 comprising, within said standard measurement protocol, defining respective spatial positions for a variety of standard imaging area with reference to said standard object.

19. A method as claimed in claim 18 comprising obtaining a variety of images of said actual object using said object-specific measurement protocol, corresponding to said variety of standard imaging areas.

20. A method as claimed in claim 15 comprising consulting an atlas to obtain said standard object in said standard measurement protocol.

21. A method as claimed in claim 15 comprising generating said standard object in said standard measurement protocol as a statistical compilation of data from a plurality of actual objects corresponding to said standard object.

22. A method as claimed in claim 21 comprising generating said standard object in said standard measurement protocol as an average of said plurality of actual objects.

23. A method as claimed in claim 15 comprising generating said geometrical relation by correlating said dataset representing features of said actual object and said dataset representing features of said standard object.

24. A method as claimed in claim 15 comprising, in said standard measurement protocol, defining a position and size of said standard imaging area.

25. A method as claimed in claim 15 comprising, in said standard measurement protocol, defining a number and thickness of image slices in said standard imaging area.

26. A method as claimed in claim 15 wherein said tomographic imaging system is a magnetic resonance system, and comprising including a pulse sequence, in said standard measurement protocol, for operating said magnetic resonance apparatus using said object-specific measurement protocol.